Application No. 09/803,082 Reply to Office Action of May 16, 2006 Attorney Docket: 42390.P10217

## **REMARKS/ARGUMENTS**

Claims 31-46 are pending in the application.

## **CLAIM REJECTIONS:**

35 USC § 103(a)

Claims 31-46

The Examiner has rejected claims 31-46 under 35 USC § 103(a) as being unpatentable over Colligan et al (U.S. Patent No. 6,415,031 B1; hereinafter "Colligan") in view of Nardone et al (U.S. Patent No. 5,805,700; hereinafter "Nardone"). Applicant respectfully traverses this rejection.

Independent claim 31 recites

selecting for encryption at least every Nth data packet between consecutive data packets having a sequence header code of a data packet sequence to provide a plurality of selected packets and a plurality of unselected data packets; encrypting the selected data packets; and initiating the transmission of the encrypted data packets and unselected data packets as an output data packet sequence in a transmission medium.

The remaining independent claims 35, 39, and 43 recite similar limitations.

Examiner and Applicant agree that Colligan fails to disclose "selecting for encryption at least every Nth data packet between consecutive data packets having a sequence header code of a data packet sequence" as recited in the independent claims. However, Applicant respectfully asserts that the Examiner has failed to establish a *prima facie* §103(a) rejection based on Colligan in view of Nardone because Nardone also fails to disclose selecting for encryption at least <u>every Nth packet between</u> consecutive data packets having a <u>sequence header code</u> of a data packet sequence as claimed.

Nardone appears to teach selective encryption implemented by a formatter capable of selectively encrypting some basic transfer units (BTUs) of the compressed video in accordance with an encryption policy (Nardone; col 2, lines 44-46). In particular, Nardone's Fig. 4 illustrates that

a series of compressed video frames 24 include a compressed I-frame 30, a number of compressed B frames 32, and a number of compressed P-frames 34, spanning the

BTUs 38'. Note that neither I-frame 30, B-frames 32, nor P-frames 34 are boundary aligned with BTUs 38'. <u>Each</u> of I-frame 30, B-frames 32, and P-frames 34 <u>includes a start code 36</u>. <u>Each VOBU</u>, that is, each group of pictures, <u>also includes a start code (not shown)</u>. (Nardone; col 3, lines 20-27; emphasis added).

and that

in the illustrated embodiment of encryption policy 40, <u>each</u> BTU 38' <u>containing the start code</u> of either a group of pictures, an I-frame 30, one of the B-frames 32 or one of the P-frames 34 <u>is encrypted</u>. (Nardone; col 3, lines 45-49; emphasis added).

Thus, Nardone appears to disclose encrypting <u>every</u> data packet of a series of compressed video frames that contains a sequence header code (i.e., the "BTUs" encrypted include the "start code" or sequence header code of each I, B or P-frame sequence).

The Examiner, however, argues that the same portions of Nardone disclose

a partial encryption wherein <u>one</u> of the I-frame, B-frame, or the P-frame is encrypted. Therefore every Nth packet between consecutive data packets is encrypted. (Office Action; page 2; emphasis added)

Applicant believes, with all due respect, that the Examiner mischaracterizes this portion of Nardone. Nardone clearly discloses with reference to Fig. 4 that <u>each</u> VOBU, I-frame, P-frame, and B-frame contains a start code or sequence header code *and* that <u>all</u> such portions having start codes are encrypted because

by encrypting <u>each</u> of the BTUs 38' containing the start code of a group of pictures or the start code of a frame, frames 30, 32 and 34 are unrecoverable, that is effectively "destroyed" (Nardone; col 3, lines 49-52; emphasis added).

Thus, as stated above, Nardone's Fig. 4 and associated text does not disclose the claimed limitations.

The Examiner continues, however, by stating that

(t)he BTUs contain the start code of a group of pictures (column 3, lines 45-50). This corresponds to the sequence header code. (Office Action; page 2)

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Here, the Examiner appears to be arbitrarily labeling only the start codes of VOBUs (i.e., group of pictures) as sequence header codes to distinguish those start codes from the start codes of the I, B, or P-frames. The Examiner does so without providing support in Nardone or otherwise for this distinction. The Examiner then combines this artificial distinction with the erroneous assertion that Nardone discloses that "only one of the I-frame, B-frame, or the P-frame is encrypted" (Office action; page 2) to reach the conclusion that Nardone discloses encryption of every Nth packet between consecutive data packets having a sequence header code.

In response, Applicant asserts Nardone does <u>not</u> distinguish the start code of a group of pictures (VOBUs) from the start code of any I, B or P-frame by describing only the start code of a group of pictures as a sequence header code. Thus, Nardone appears to disclose that all start codes are sequence header codes. Further, Nardone does not disclose, as the Examiner believes, that only one of the I-frame, B-frame, or the P-frame is encrypted in the embodiment of Fig. 4. Rather, as shown above, Nardone's Fig. 4 and related text disclose that all start codes are selected for encryption.

Finally, while Nardone does appear to disclose other embodiments having selective encryption of some data packets having start codes (Nardone; col. 3, line 65 to col. 4 line 13), Nardone does not appear to disclose selective encryption of every Nth data packet between consecutive data packets having a sequence header code as claimed. To do so, Nardone would, at the very least, need to disclose selective encryption of every Nth packet between consecutive data packets having a sequence header code such as, for example, selective encryption of every Nth packet between the start code of an I-frame and the start code of a subsequent P-frame, which Nardone plainly fails to disclose.

Thus, in conclusion, Applicant asserts that the Examiner has failed to support a *prima facie* rejection under 35 USC § 103(a) as being unpatentable over Colligan in view of Nardone because neither Colligan nor Nardone, either alone or in combination, teaches or suggests all limitations of invention as claimed.

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## **CONCLUSION**

In view of the foregoing, it is respectfully asserted that all of the claims pending in this patent application are in condition for allowance.

Should it be determined that an additional fee is due under 37 CFR §§1.16 or 1.17, or any excess fee has been received, please charge that fee or credit the amount of overcharge to deposit account #02-2666.

If the Examiner has any questions, she is invited to contact the undersigned at (503) 264-6473.

Reconsideration of this patent application and early allowance of all the claims is respectfully requested.

Respectfully submitted,

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